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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,648	03/20/2002	Shinichi Takeshima	112342	2766

7590 01/13/2006  
Oliff & Berridge  
PO Box 19928  
Alexandria, VA 22320

EXAMINER

JOHNSON, CHRISTINA ANN

ART UNIT PAPER NUMBER

1725

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/088,648

Applicant(s)

TAKESHIMA ET AL.

Examiner

Christina Johnson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,7 and 15 is/are allowed.
- 6) ☒ Claim(s) 2 and 8 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1-121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 852 966.

EP 0 852 966 discloses a catalyst composition useful in the purification of exhaust gas. The catalyst composition comprises a first powder comprising porous particles supporting rhodium and a second powder comprising porous particles supporting platinum (page 3, lines 5-10 and page 8, lines 25-30). Examples of the porous particles include alumina, silica, titania, zirconia, silica-alumina, and zeolite (page 8, 1-5). The reference specifically teaches a composition comprising a first powder containing rhodium, barium, and zirconia and a second powder comprising platinum, barium, titania, and alumina (Example 22). It is taught that the powders may be loaded on a monolithic structure, which is considered to meet the particulate matter filter required.

With respect to the language of the claims, the first powder is considered to correspond to the NO<sub>2</sub> decomposition catalyst and the second powder is considered to correspond to the NO oxidation catalyst.

The recitations "decomposition catalyst" and "oxidation catalyst" are noted by the examiner. These recitations are regarded by the examiner as statements of intended use. While intended use recitations cannot entirely be disregarded, in composition and article claims, the intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. In re Casey, 370 USPQ 236 and In re Otto, 312 USPQ 458. It is the position of the examiner that the prior art structure is capable of performing the intended use and therefore meets the instant claims.

The difference between the reference and the claims is that the reference does not specifically disclose an embodiment wherein the second powder includes silica or silica- alumina. However, the reference does disclose that suitable particles for the first and second powders include silica, titania, alumina, and silica-alumina (page 8, lines 1-5).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the specific examples provided to include the use of silica or silica-alumina in place of the titania-alumina support shown in Example 22, in light of the teaching by the reference that such particles are functionally equivalent. One of ordinary skill would be motivated to substitute known functionally equivalent supporting particles in the second powder, with a reasonable expectation of success.

***Allowable Subject Matter***

3. Claims 1, 7, and 15 are allowed.
4. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. It is noted that claim 16 should be dependent upon claim 2, in light of the amendment to claim 1. Therefore, the claim should include all of the limitations of claim 2.

***Response to Arguments***

5. Applicant's arguments with respect to claims 2 and 8 have been considered but are not persuasive.

Applicant argues that the EP reference fails to teach or suggest that the first powder must include an alkali metal and/or alkaline earth metal along with the rhodium. However, as discussed above, Example 22, which is the basis of the obviousness rejection, specifically discloses a first powder containing rhodium, barium, and zirconia. Therefore, the reference would meet the composition of the claimed NO<sub>2</sub> decomposition catalyst.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Johnson whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Christina Johnson  
Primary Examiner  
Art Unit 1725

1/10/06

CAJ  
January 10, 2006